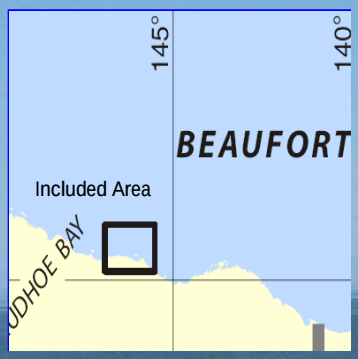
BookletChart™

Bullen Point to Brownlow Point

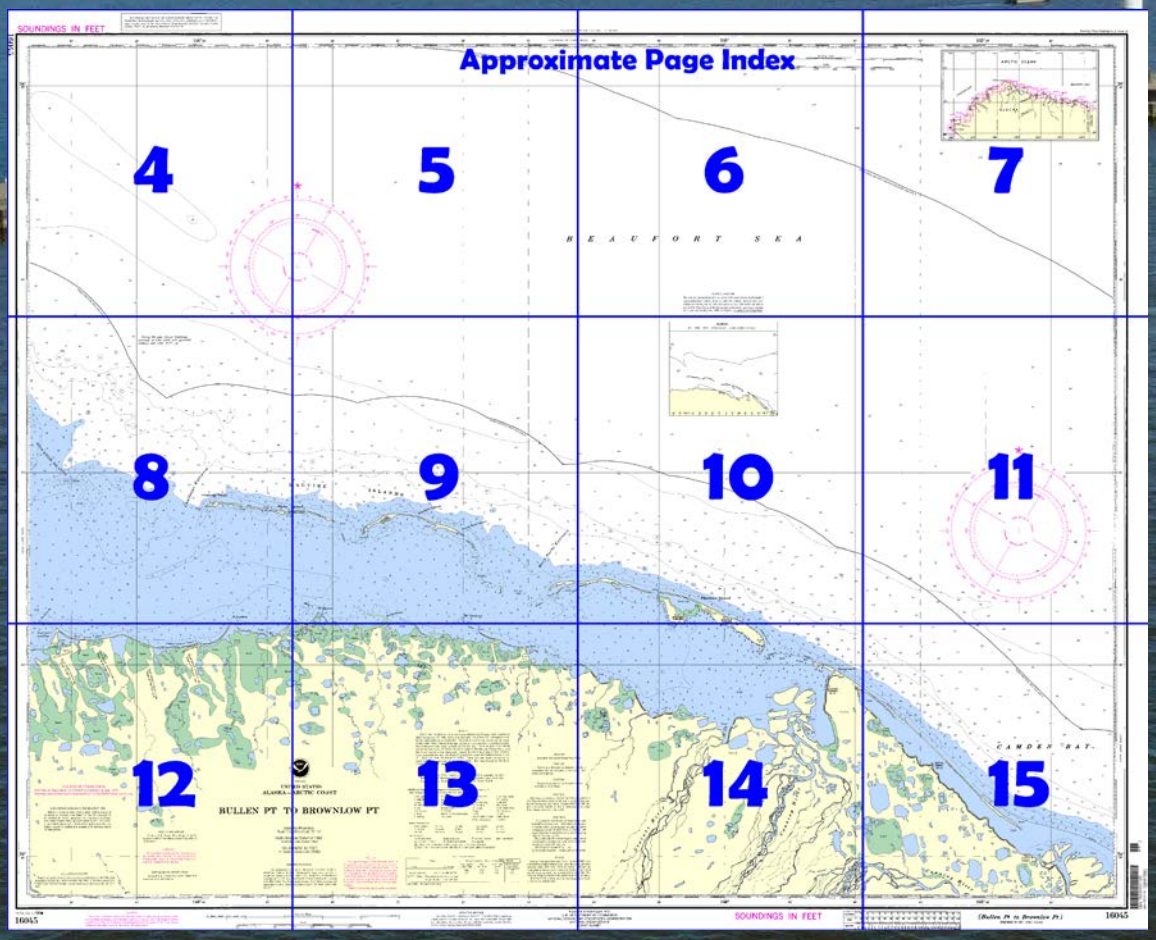
NOAA Chart 16045

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

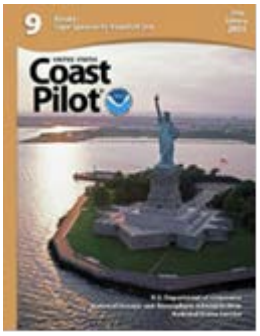
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=16045.

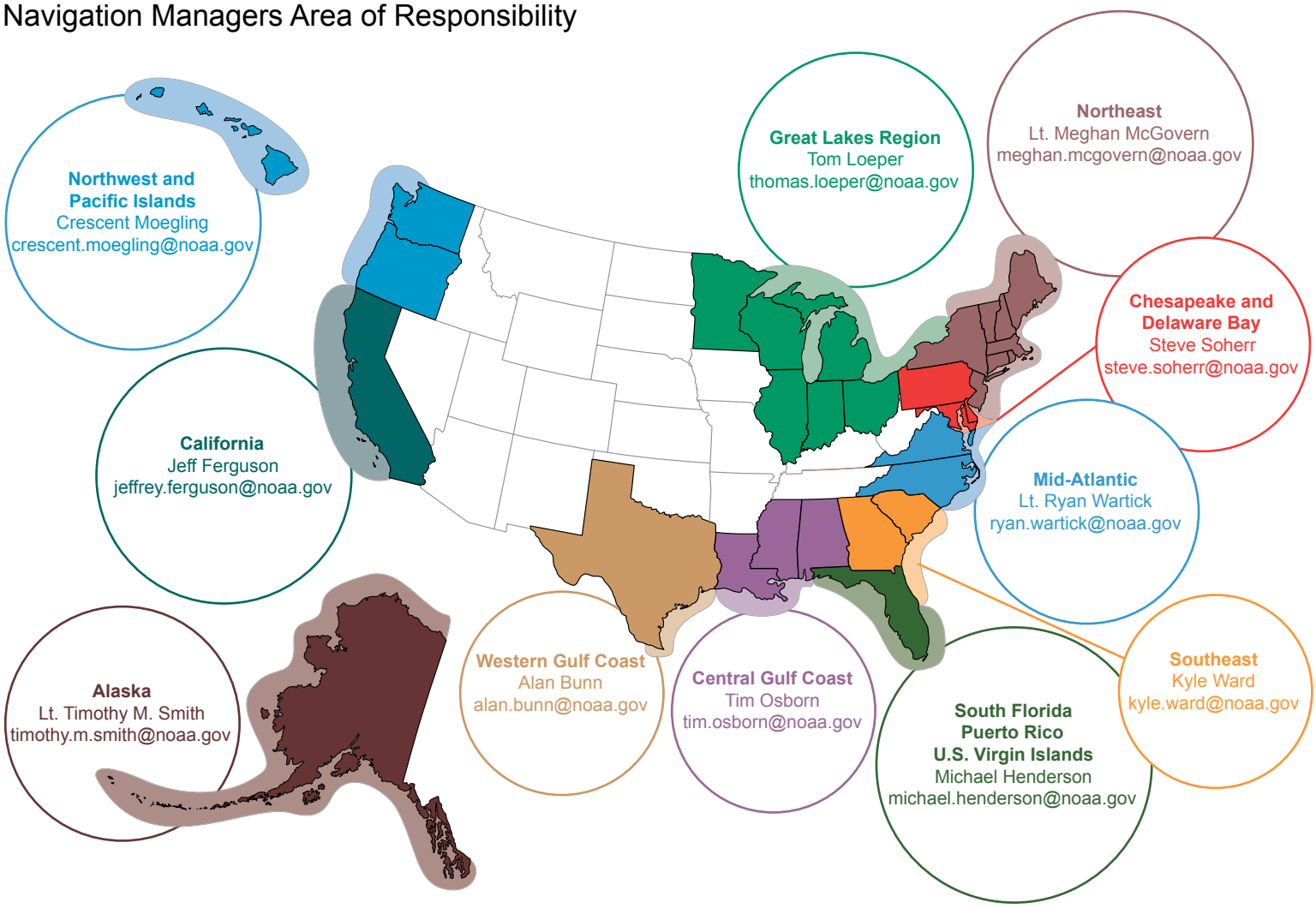


(Selected Excerpts from Coast Pilot)
Challenge Entrance is between Belvedere Island and Challenge Island, 6 miles to the SE. The W side of the opening and the area immediately S of Belvedere Island are shallow and dotted with tiny islets and bare shoals. The best water is 0.8 mile W of Challenge Island where vessels drawing 10 feet or less can enter with safety.
Challenge Island, the westernmost of the **Maguire Islands**, is a strip of sand about 0.5 mile long and 3 feet high. **Alaska Island**, that begins 0.2 mile E of Challenge Island and continues 3 miles farther E, is a very narrow sand and gravel formation; the easternmost third has been cut through in several places and is a series of sandbars, shoals, and islets. There is no channel between Challenge and Alaska Islands.
Duchess Island, 1 mile E of Alaska Island, is 1 mile long and 5 feet high. There is a narrow channel between Duchess and Alaska Islands but it is not recommended.
North Star Island, 0.2 mile SE of Duchess Island and easternmost of the four principal Maguires, is another narrow sand barrier about 1 mile long and has extensive shoals on the S and SE sides. There are narrow channels at both ends of the island but they are shallow and subject to constant change.
Mary Sachs Entrance, between North Star Island and Flaxman Island, has extensive shoals on both E and W sides. There is a 0.7-mile-wide passage with depths of 10 feet about midway between the two islands.
Flaxman Island, which begins 2 miles ESE of North Star Island and continues 6 miles to within 2 miles of mainland Brownlow Point, is the largest barrier island between the Return Islands and the point. The W part of the island is mostly sand and gravel; the E part has tundra bluffs up to 20 feet in height and numerous small ponds, but freshwater is not available in any substantial quantity.
Passage has been made between Flaxman Island and Brownlow Point by staying close to the E end of the island until well into the lagoon; the channel has depths of 8 feet which shoal to 4 feet in the lagoon. The shoals that stretch from Brownlow Point to the E side of the narrow channel usually are marked by breakers or ice.
The mainland between Bullen Point and Brownlow Point has numerous other points, sandspits, and bluffs. The W branch of Canning River empties into the lagoon SW of Brownlow Point; the river delta forms extensive shoals in the E part of the lagoon.
Brownlow Point (70°09.8'N., 145°51.0'W.), 20 miles E of Bullen Point, is the most N feature of **Canning River** delta; the tundra point has elevations up to 25 feet. A sand and gravel bar, partly bare at high water, extends from Brownlow Point SE past Canning River E branch to within 2 miles of Konganevik Point. (See chart 16044.)
From Brownlow Point to Canning River E branch, the lagoon between the delta and the barrier bar is about 0.5 mile wide and has depths of 2 to 3 feet. The discharge from the river discolors the sea water for many miles. SE of the river's E branch is a lagoon that provides excellent small-craft anchorage in depths of 8 to 10 feet; the best approach from seaward is around the SE end of the barrier bar at a distance of 0.3 mile. A covered ridge that extends halfway from Konganevik Point to the bar protects the lagoon from NE wind-driven ice. The lagoon was ice free in mid-August 1976.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Juneau	Commander 17th CG District Juneau, Alaska	(907) 463-2000

Navigation Managers Area of Responsibility

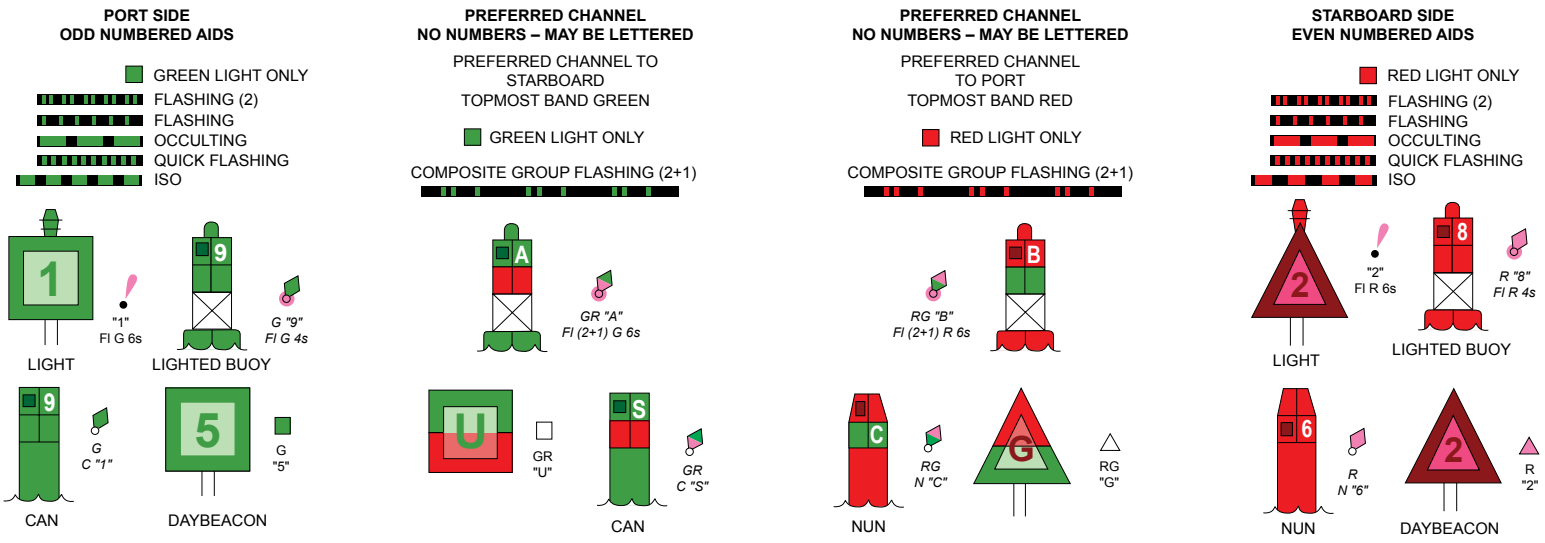


NOAA's navigation managers serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit *nauticalcharts.noaa.gov/service/navmanagers*

To make suggestions or ask questions online, go to *nauticalcharts.noaa.gov/inquiry*.
To report a chart discrepancy, please use *ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx*.

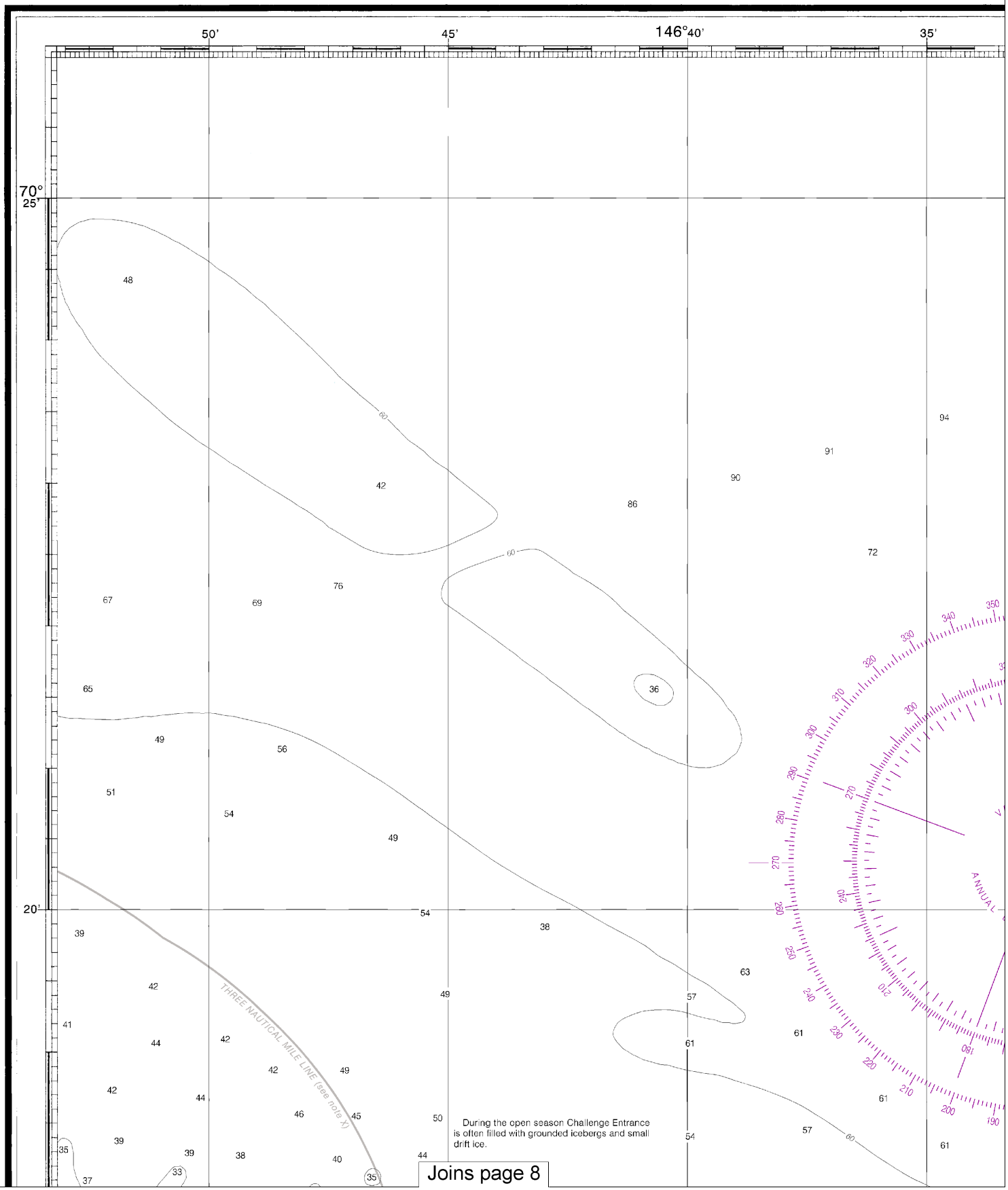
Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at *http://www.navcen.uscg.gov*

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

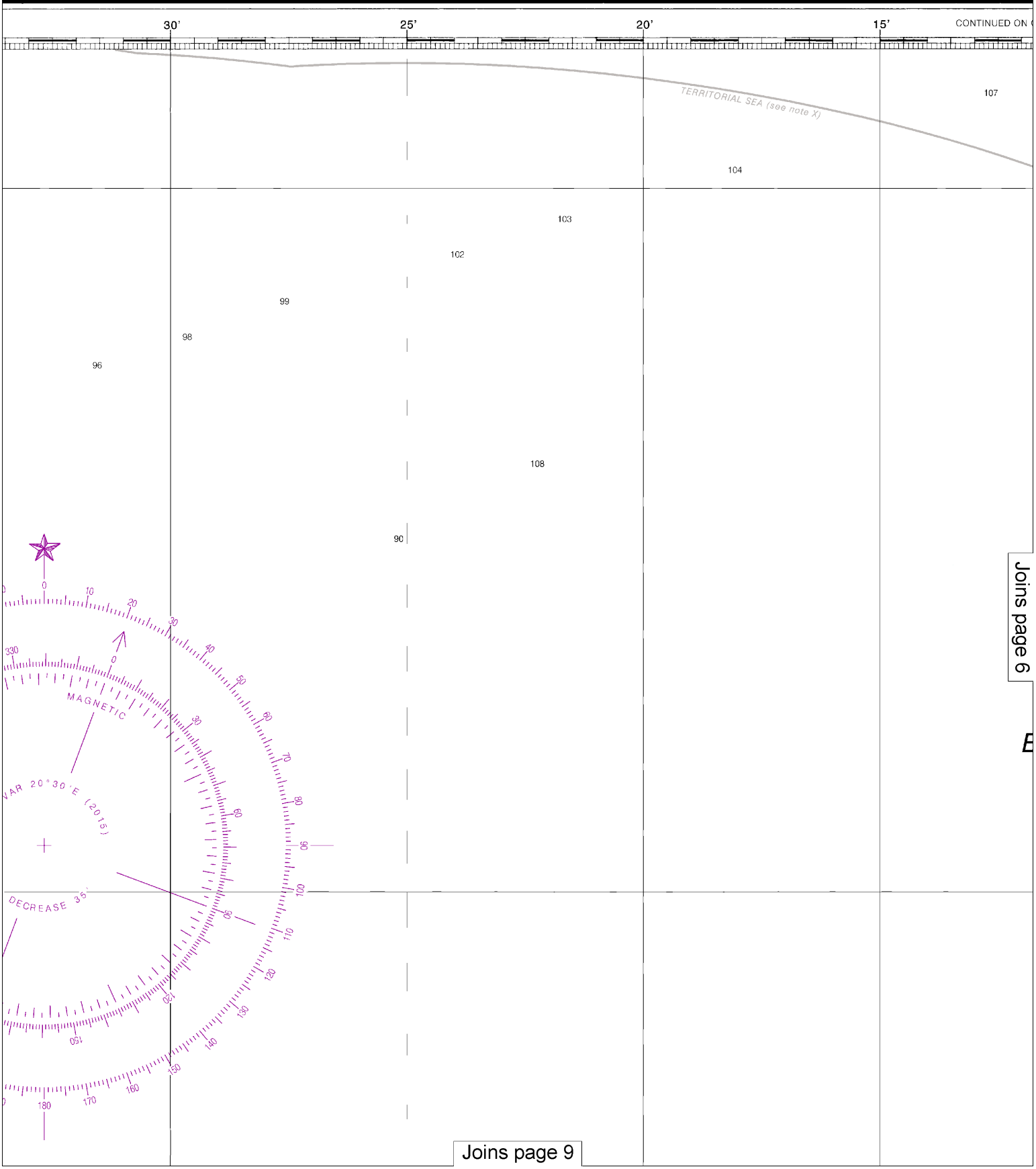


Joins page 8

4

Note: Chart grid lines are aligned with true north.

30' 25' 20' 15' CONTINUED ON



Joins page 6

Joins page 9

This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:67486. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

D ON CHART 16004 10' 05' 146° 55'

SCALE 1:50,615
Nautical Miles
1 ½ 0 1 2
Yards
1000 0 1000 2000 3000

110 121 110 123 107 112 114 123 109 106 110 103 105 105 104 TERRITORIAL SEA (see not 101 102 90 99 99 96 99 97 97 95 94 89

Y
Strobe
Ra Ref
Priv

Subm buoy
(cov 14 fms)

Subm buoy
(cov 15 fms)

B E A U F O R T S E A

Joins page 5

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

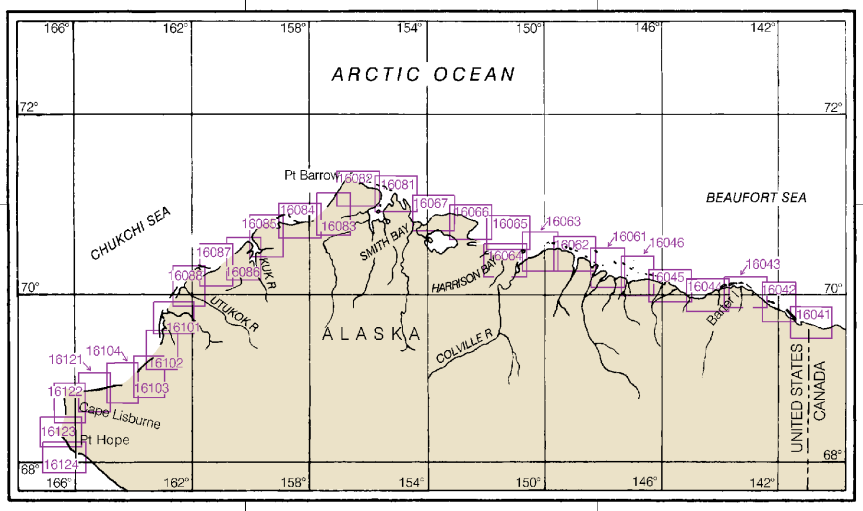
SOURCE			
B3	1940 - 1969	NOS Surveys	partial bottom coverage

70° 25'
B3
20'

Joins page 10

6

Note: Chart grid lines are aligned with true north.



50' 45' 145°40' 35' 70° 25' 20'

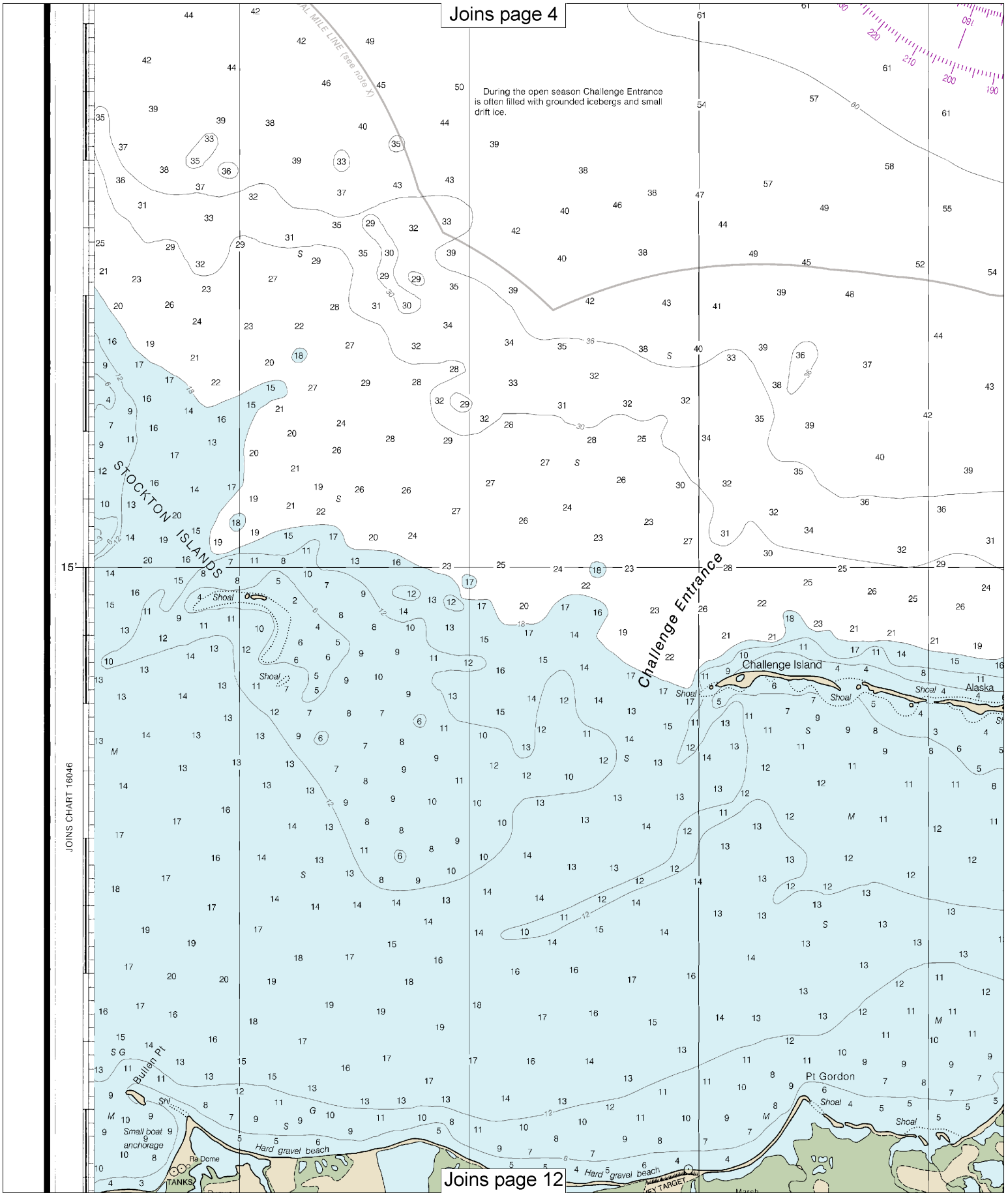
4000 5000 6000

120 121 102 124 125 124 128 128 103 99 97 96 97 97 95 95 91 90 92 98

TERRITORIAL SEA (see note X)

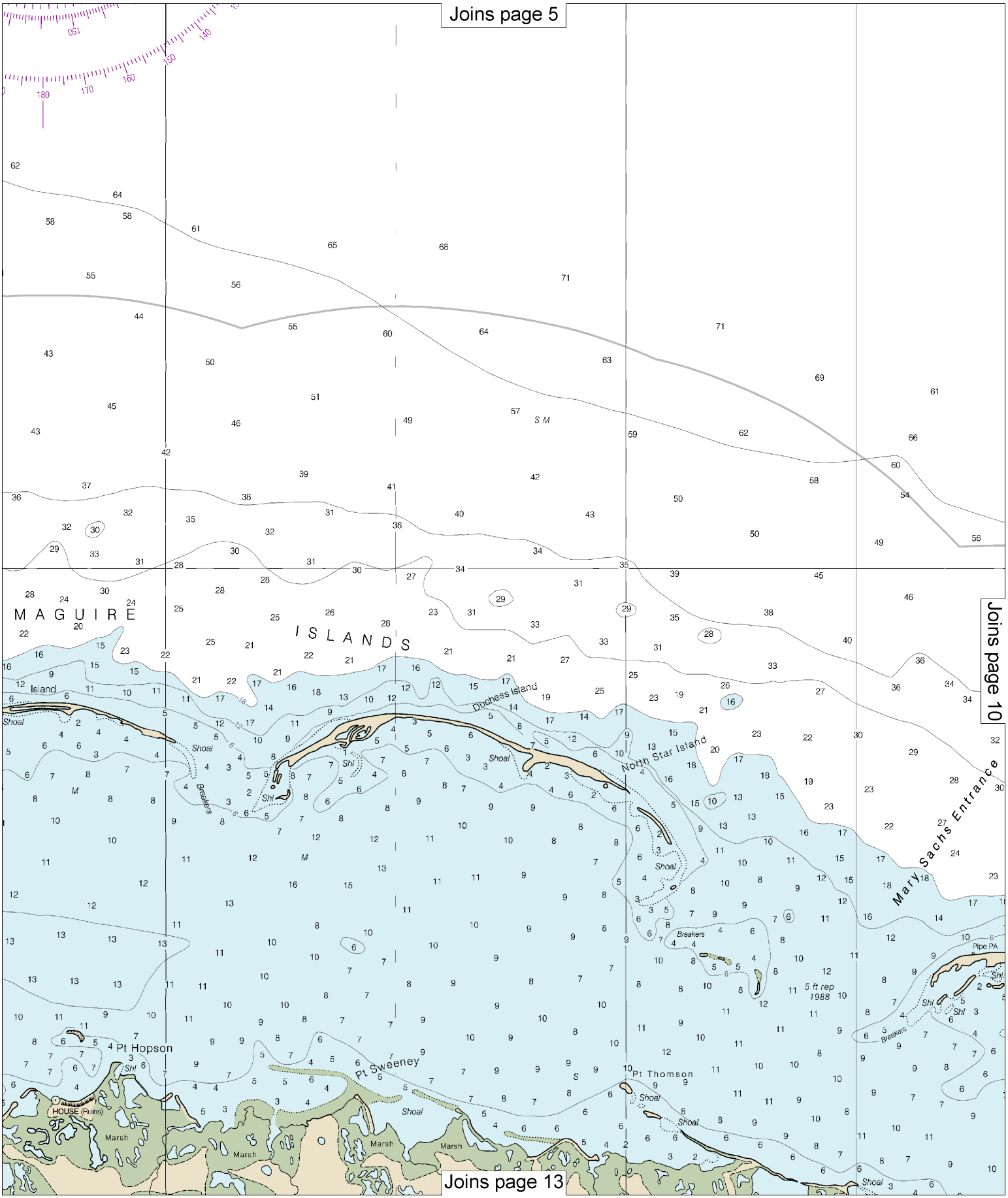
Joins page 11

8th Ed., Jan. 2015. Last Correction: 1/9/2015. Cleared through:
LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)

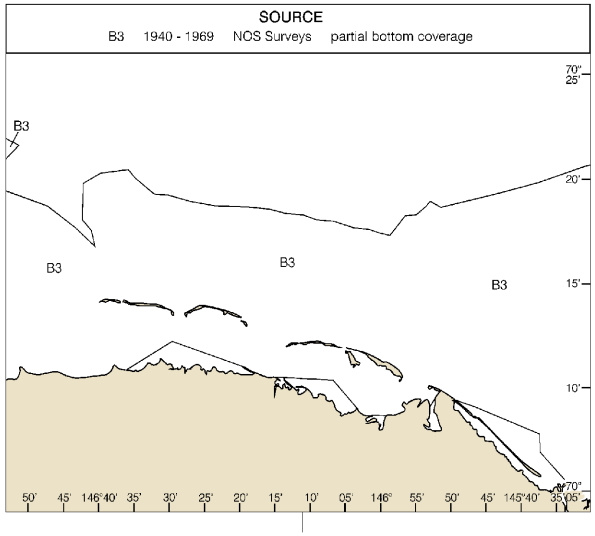


8

Note: Chart grid lines are aligned with true north.


Joins page 5
MAGUIRE
ISLANDS
Island
Duchess Island
North Star Island
Mary Sachs Entrance
Pt Hopson
Pt Sweeney
Pt Thomson
HOUSE (Ruins)
Marsh
Shoal
Breakers
Shl
Pipe PA
5 ft rep
1988
Joins page 10
Joins page 13

Joins page 6



Joins page 9

THREE NAUTICAL MILE LINE (see note X)

Flaxman Island

Shoal area

SURVEY TARGET

SURVEY TARGET

Shoal

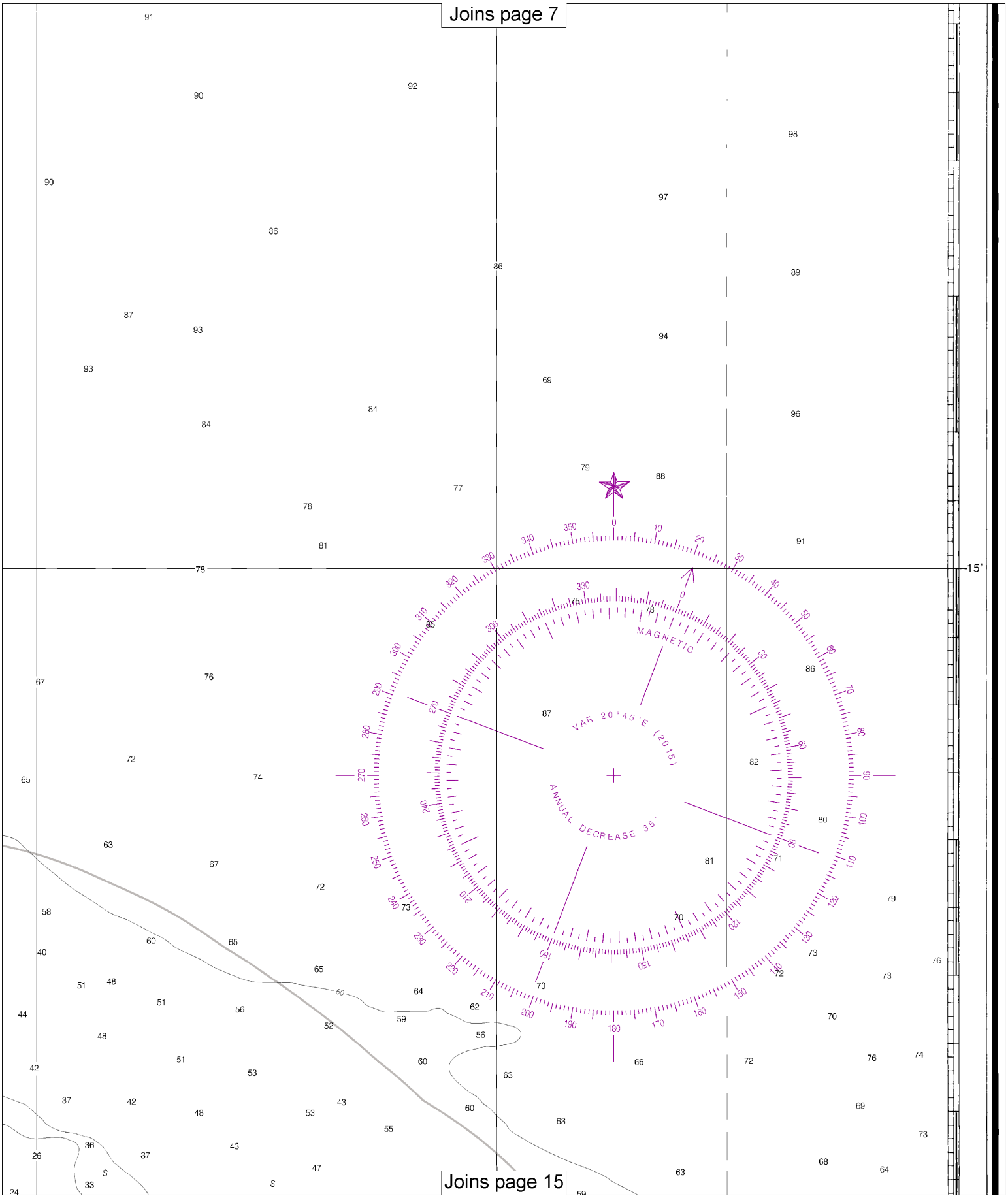
Shoal

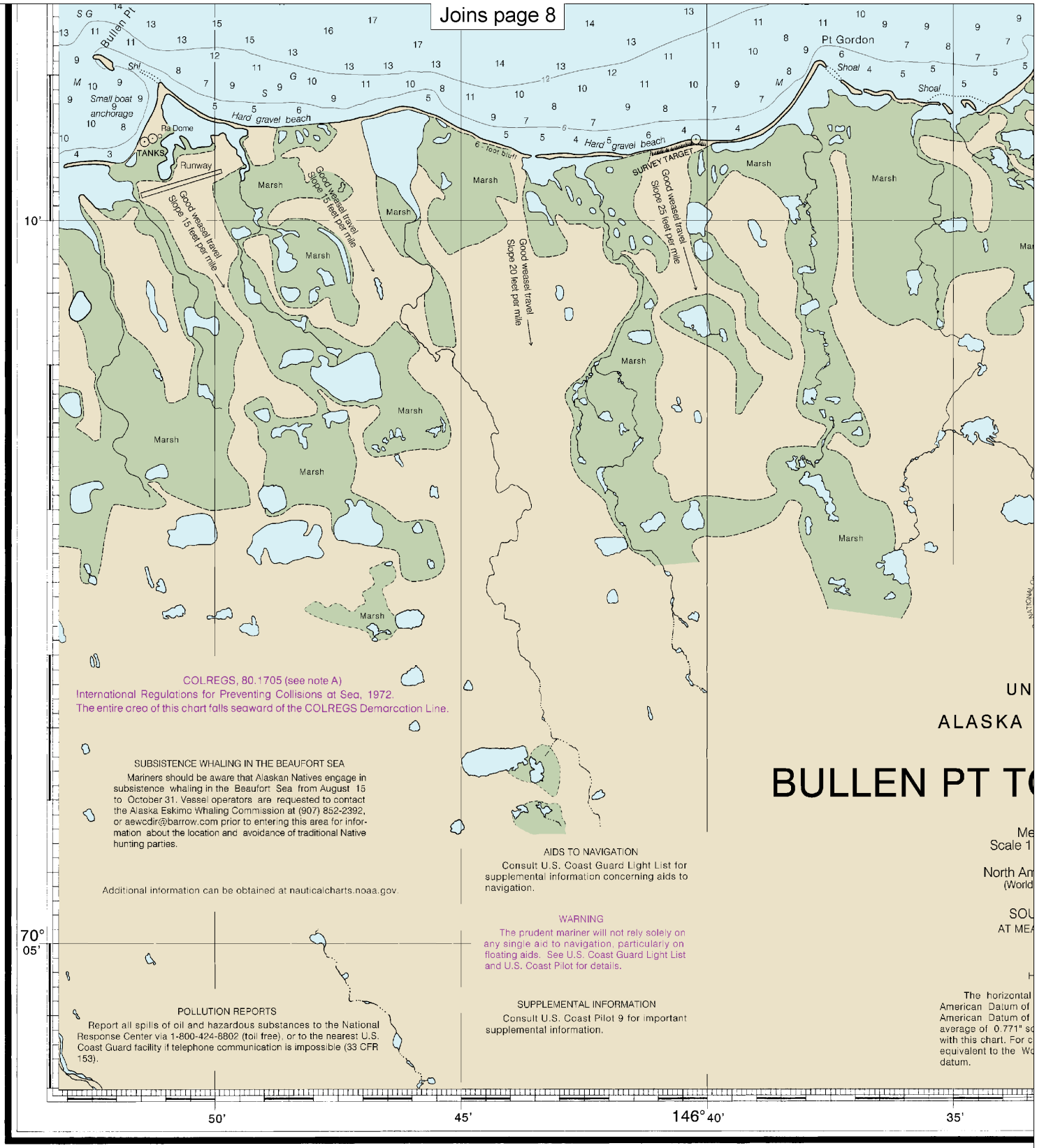
Shoal

Breakers

Joins page 14

Note: Chart grid lines are aligned with true north.


Joins page 7
MAGNETIC
VAR 20° 45' E (2015)
ANNUAL DECREASE 35'
15'
Joins page 15



CAUTION

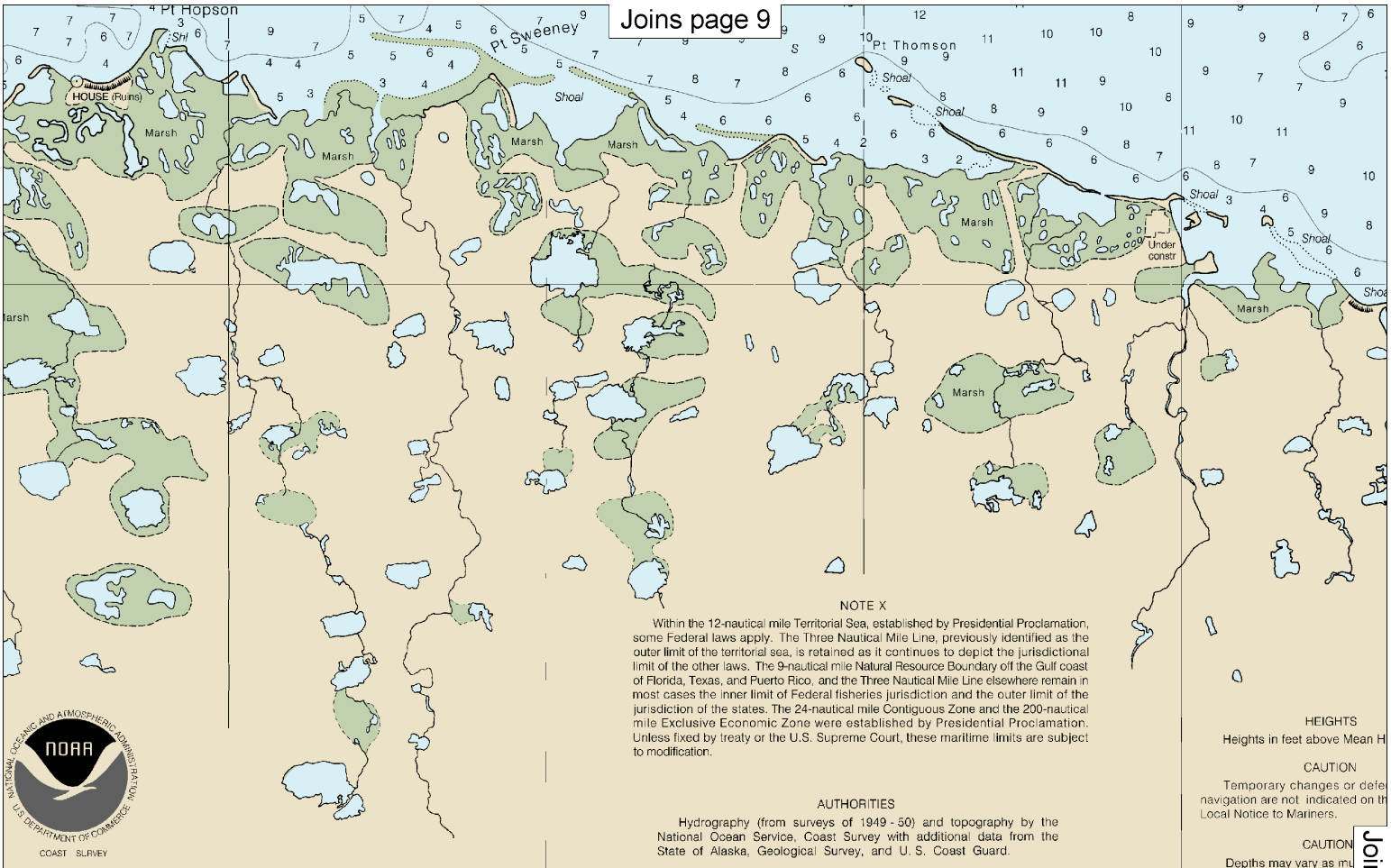
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

16045

8th Ed., Jan. 2015. Last Correction: 1/9/2015. Cleared through:
LNM: 4916 (12/6/2016), NM: 5116 (12/17/2016), CHS: 1116 (11/25/2016)

Note: Chart grid lines are aligned with true north.

Joins page 9



NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
COAST SURVEY

NITED STATES
- ARCTIC COAST

O BROWNLOW PT

Mercator Projection
1:50,615 at Lat. 70° 15'

American Datum of 1983
ld Geodetic System 1984)

OUNDINGS IN FEET
EAN LOWER LOW WATER

HORIZONTAL DATUM

al reference datum of this chart is North
f 1983. Geographic positions on North
f 1927 (NAD 27) must be corrected an
southward and 10.453" westward to agree
charting purposes, NAD 83 is considered
World Geodetic System of 1984 (WGS 84)

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

AUTHORITIES

Hydrography (from surveys of 1949 - 50) and topography by the National Ocean Service, Coast Survey with additional data from the State of Alaska, Geological Survey, and U. S. Coast Guard.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bld boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Flaxman Island	(70°11'N/145°50'W)	0.7	0.6	0.1

NOTE: The periodic tide has a mean range of about one-half foot.

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Oct 2014)

HEIGHTS

Heights in feet above Mean H

CAUTION

Temporary changes or defe navigation are not indicated on th Local Notice to Mariners.

CAUTION

Depths may vary as mu to iceberg groundings.

CAUTION

Mariners are advised that in the Beaufort Sea, water levels a by meteorological conditions. St produce water depths up to 0.8 than those shown on this chart

CAUTION

Limitations on the use of rad aids to marine navigation can be U.S. Coast Guard Light Lists a Geospatial-Intelligence Agency Pub Radio direction-finder bearings broadcasting stations are subjec should be used with caution.

Station positions are shown thus ⊙(Accurate location) o(Approxi

RACON

Radar Transponder Beacons, c activated by radars operating on the X- 9300 to 9450 MHz and, when activa international morse code character wi on the radar screen that activated t effective range of the RACONS will be fr

The RACONS will be maintained 1 July to 15 September.

Joins page 14

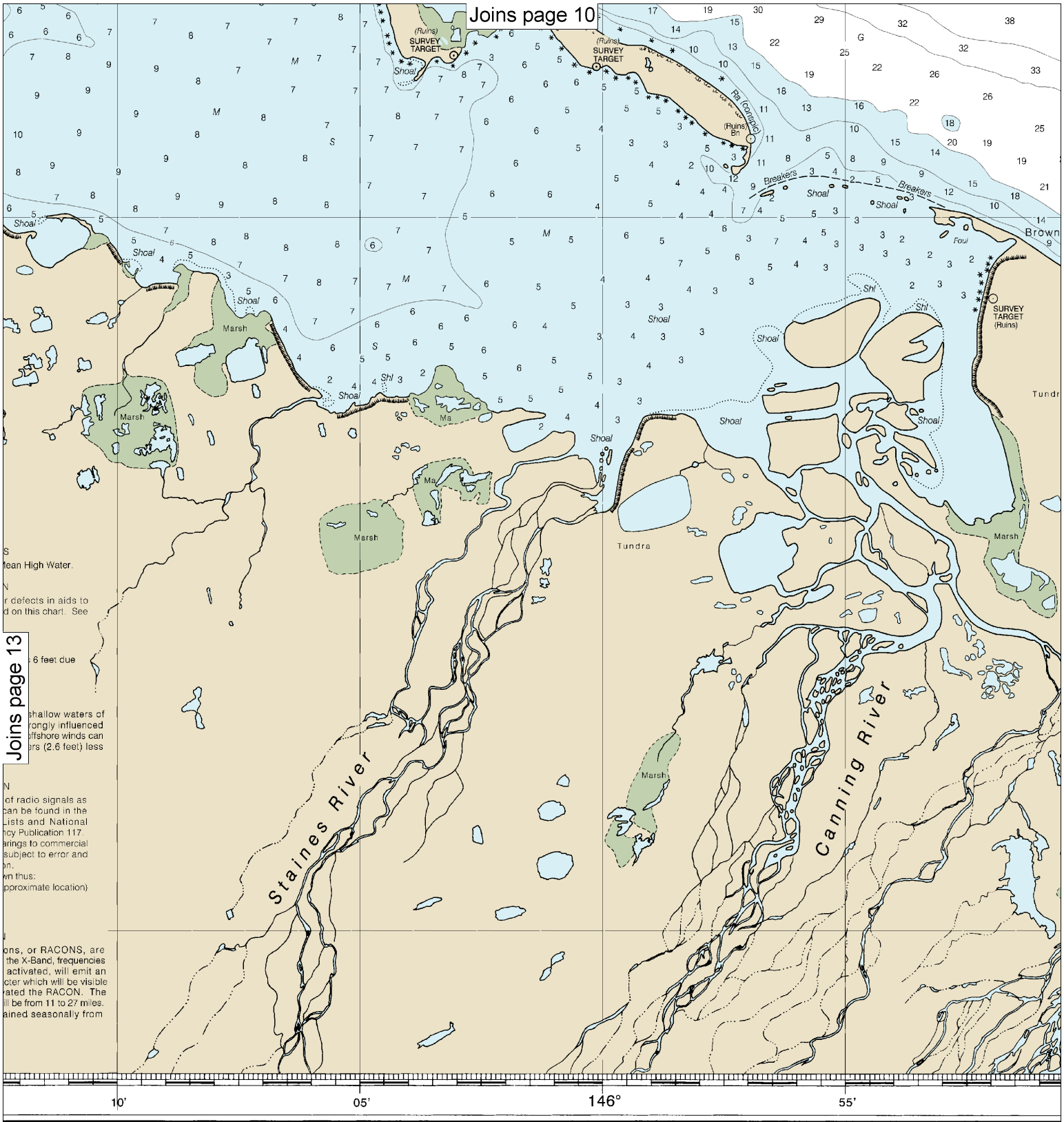
30' 25' 20' 15'

SCALE 1:50,615

Nautical Miles 2 3 4

Yards 2000 3000 4000 5000 6000

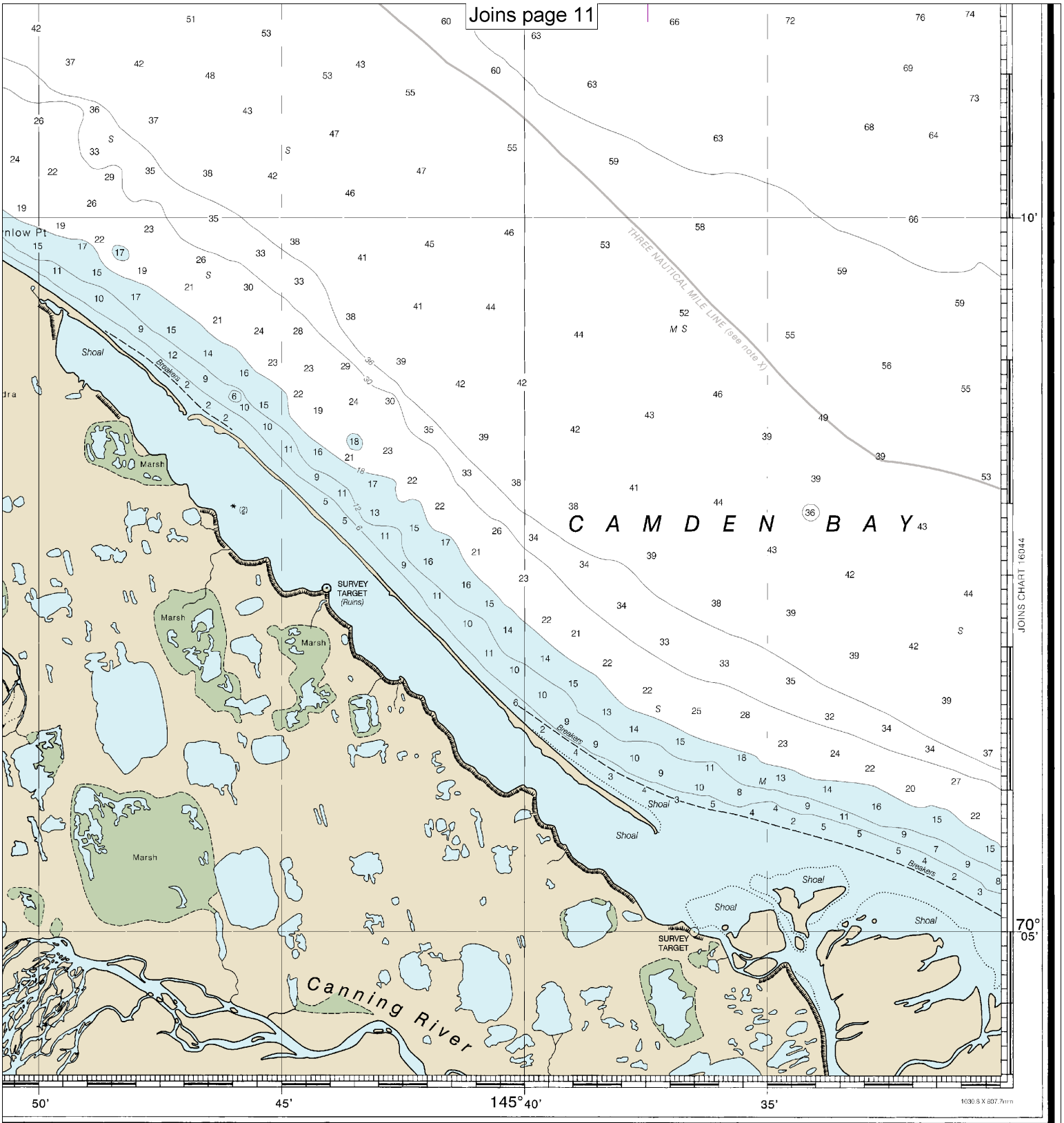
P
U.S. D
NATIONAL OCEA



Published at Washington, DC
U.S. DEPARTMENT OF COMMERCE
OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

SOUNDINGS IN FEET

Note: Chart grid lines are aligned with true north.



FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31																

Bullen Pt to Brownlow Pt

SOUNDINGS IN FEET - SCALE 1:50,615

16045

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
Interactive chart catalog	—	**http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey The Nation's Chartmaker